

Impact of General Agreements on Trade In Services on the Balance of Payment of Nigeria

Oladimeji, Moruff Sanjo^{1*} Kehinde, J.S.² (Ph.D.)

Dept. of Economics

Michael Otedola College of Pry. Education

Noforija-Epe, Lagos State. Nigeria.

Tel.: (234) 80 235 677 21

Dept. of Accounting & Finance

Lagos State University, Ojo, Nigeria.

* E-mail of the corresponding author: sanjolanre@yahoo.com

Abstract

This paper examined the impact of General Agreements on Trade in Services on the Balance of Payment of Nigeria. Both primary and secondary data were used through the use of questionnaire, interview and adoption of already made data from CBN Statistical bulletin. The data were both analyzed with the use of Econometric View (E-VIEWS) statistical package. Both descriptive and inferential statistical analyses were carried out using simple percentages, content analysis and the t statistic. The overall results obtained from the test of hypotheses was not significant, and thus the null hypothesis was accepted, implying that the Signing of GATS agreements by the Nigerian government does not have much influence on the nation's balance of payment.

Key words: General Agreement on Trade in Services (GATS), Balance of Payment, Nigeria.

1. Introduction

The General Agreements on Trade in Services came into existence in 1995 as a result of the fact that for nearly five decades, most developing countries that are members of international institutions such as the International Monetary Fund (IMF), General Agreements on Tariff and Trade (GATT), International Bank for Reconstruction and Development (IBRD) e.t.c. did not receive any significant benefit of the Multilateral Trading System that they are involved in. (Otokiti, 1995.) Hence, the World Trade Organization (WTO) came into existence in 1995. WTO comprises of three agreements – Agreements on Trade in Goods, General Agreements on Trade in Services (GATS) and Agreements on Intellectual Property Right (TRIPS). The essence of these agreements was to rectify the abnormalities in the former agreements, particularly as it affects declining share of LDCs in the growing global trade in services (Hoekman, 2000).

Based on the relative importance of GATS to any economy, this work tried to examine whether the signing of GATS agreements by the Nigerian government has any influence on her balance of payment position or not.

2. Conceptual Clarifications and Theoretical Framework

The General Agreements on Trade in Services (GATS) is an agreement of the World Trade Organization whose objectives are to remove government barriers to provision of services, and to improve and provide market access. Within the structure and framework of agreements, new nomenclatures and operational terminologies have been developed. Within this range we have the term 'Service' which covers heterogeneous products and activities of industries that typically dominate absolute output and employment in most of these countries. This term encompasses both intermediate activities such as communications, transport, financial, construction, and business. It also includes final services such as tourism and travel, recreation, education, health and environmental services; waste disposal, sanitation, entertainment, e.t.c.

Wajid (2002) defined GATS as an inter-governmental agreement to establish a multilateral framework of principles and rules for trade in services. The principal aim according to him is the expansion of services trade under a

condition of transparency and progressive liberalization and as a means of promoting the economic growth of all trading partners and the development of third world countries (WTO, 2000). Farah (2001) said that the General Agreement on Trade in services (GATS) which was created at the inception of the World Trade Organization in 1994 is the first legally enforceable trade agreement that covers trade and investment in services.

The GATS according to Wajid (2005) is a comprehensive legal framework of rules and disciplines covering 161 service activities across 12 classified sectors. The GATS is an inter-governmental agreement to establish a multilateral framework of principles and rules for trade in services and according to Vik, Westerheijden, and Wende (2008), GATS consist of three interrelated parts viz:

- (1) The Agreement itself, which is often referred to as the Framework Agreement. It contains the rules applicable to all WTO member states; who are automatically parties to the GATS agreement.
- (2) Sectoral Annexes on issues unique to particular economic sectors e.g. movement of natural persons, air transport services, financial services, maritime transport services and telecommunication,
- (3) National Schedules of Specific Commitments.

The framework was further to subdivide into six parts, incorporating (I) scope and definition, (II) general obligations and disciplines, (III) specific commitments, (IV) progressive liberalization, (V) institutional provisions, and (VI) final provisions.

The GATS according to Farah (2001) mandate the WTO countries to liberalize their service industries and gradually phase out tariff and non-tariff barriers to trade in services. Non-tariff trade barriers include subsidies, domestic regulations and environmental regulations are considered impediment to competition and trade. Service is an economic activity that adds value either directly to other economic units or to a good belonging to another economic unit. Services have a defining feature, the requirement for direct interaction between producers and consumers (firms or households) before a service can be rendered; and that it is invisible and intangible, at the same time it can not be stored. Services are inputs to economic production which adds value to economic goods.

Service is an economic activity that adds value to other goods; it is an activity, rather than tangible goods, which aim to satisfy human needs (Sinclair, 2000). Services can be any activity from providing a commodity such as water or education to provide labour or advice (Sinclair, 2000).

Services make up about 60% of the global economy and are the fastest growing sector of international trade (Sinclair, 2000, Hisanaga, 2005). The rate of growth of trade in services is also higher than other trade components. Trade in services increased on an average of 7% per year between 1989 and 1998 while the corresponding increase in merchandise trade was 6% in the same period.

Services according to WTO (2010) currently represent more than two thirds of World Gross Domestic Product (GDP). The share of trade in services in total world trade according to Oyejide and Bankole (2001) increased from 15.7% in 1989 to 16.3% in 1998. As at 1998, Services are growing in both rich and poor countries and the percentages of their contributions to GDP are as follows, 75% in USA, 60% in EU, 50% in middle income countries, 40% in LDCs. WTO (2010) confirmed this, and that the share of services value added in GDP tends to rise significantly with the countries' level of income, standing at 73% on average in high income countries (77% in the United States), against 54% and 47% respectively in middle- and low- income countries.

It could also be revealed that significant differences however exist between countries within the same income group, for instance, India and Nigeria – two middle income countries, whose respective shares of services in GDP are 54% and 27%, or Kenya and Liberia – two low income countries whose shares are 54% and 22% (see graph 2.1). Share of goods exports fell from 2.5% of world exports in 1989 to 1.8% in 1998 while the region's share of services exports fell from 1.8% in 1989 to 1.6% in 1998, lower than the reduction in the share of goods exports Oyejide and Bankole (2001).

• **Insert Figure 1 here -**

The Total world export of trade in services amounted to 364.3 billion dollar in 1980 increased to 1,858.8 billion dollars in the year 2003 and rose to US\$ 3,350 billion in 2009, with average growth rate of 7.9% per year in value

terms since 1980 (Hisanaga, 2005). Services account for 75% of global FDI (US\$ 500 billion in 2005), accounting for 20-25% of total world trade, in 2005.

Trade in *commercial services* grew faster than trade in *goods* (6.6% on average) during this period, increasing its share in total world trade by 6 percentage points. In 2009, the share of *services* in world trade reached 21% that is 2 percentage points up from the previous year, as the decline in global trade in services was considerably less pronounced than that of goods, this is shown in the graph 2 below.

• **Insert Figure 2 here** -

- i) Mode 1: Cross border trade which is defined as delivery of a service from the territory of one country into the territory of other country.
- ii) Mode 2: Consumption abroad; this mode covers supply of a service of one country to the service consumer of any other country.
- iii) Mode 3: Commercial presence, which covers services, provided by a service supplier of one country i.e. foreign direct investment undertaken by a service provided.
- iv) Mode 4: Presence of natural person which cover services provided by a service supplier of one country through the presence of natural persons in the territory of another economy.

The Relative Importance of Trade Flows according to WTO (2005), are as follows, Mode 1: Cross Border supply = 35%, Mode 2: Consumption abroad = 10-15%, Mode 3: Commercial presence = 50%, Mode 4: Presence of natural persons = 1-2%, as at 2005. The above shows that mode 3 is the most important among the entire mode.

3. Research Instruments

Three types of research instrument were used to carry out this study. These include the questionnaire, interview and secondary source. The questionnaire responses were classified with the help of two scales; the five –point Likert-Scale (Likert, 1961) which ranges from ‘strongly agree’ to ‘strongly disagree’. (5-‘strongly agree’ 4-‘agree’ 3-‘undecided’, 2-‘disagree’ 1-‘strongly disagree’) and another one that range between ‘very large extent’ and ‘very small extent’. (5- ‘very large extent’, 4- ‘large extent’, 3- ‘undecided’, 2-‘small extent’, 1- ‘very small extent’) to reflect the responses of the respondents. The questionnaire was divided into two parts, The first part dealt with demographic profiles of respondents while the second part dealt with questions relevant to the Personal interview used in order to have spot assessment on the issues in research questions and hypotheses.

4. Method of Data Collection

This work made use of both primary and secondary data. The primary data was based on the data sought from interview of people and questionnaires while the secondary data was sought from publications of both the Central Bank of Nigeria, National Bureau of Statistics as well as WTO Direction of Trade, and IMF Direction of Trade.

5. Reliability of the Instrument

The reliability or consistency of the instrument used was established by subjecting it to a pilot test through the test-re-test method and Kuder Richardson’s K-R (21) formulae were used to ascertain the reliability level of the instruments.

6. Method Data Analysis

The data were analyzed electronically with the use of Econometric Views (E-VIEWS) statistical package. Both descriptive and inferential analysis were carried out using percentages, frequency counts and student t statistics.

7. Results and Discussion

- **Insert Table 1 here** -

The statistics shown above describes the characteristics of the variables used for the analysis. From the results displayed, the Gross Domestic Product (GDP) has the highest mean value of 3761674 within the period observed.

The greatest spread is demonstrated by the GDP and BOP as indicated by their standard deviation value. All the variables pass the normality test except economic development variable that is on the marginal side.

It was also revealed that all the service sectors variables are positively skewed with GDP and BOP having highest peak. The Unit Root test was also used to test for the stationarity of the variables and the level of significance of the data used. Table 4.8 below shows the unit root result.

• **Insert Table 2 here** -

From the stationery test carried out, all the variables analyzed, that is GDP and BOP, appeared not to be stationary at levels. This occurrence was observed even at first difference. The variables were however stationary at second difference. This case was however not expected since it was believed that most economic variables are only stationary at first difference.

• **Insert Table 3 here** -

From the above result, between 1985-1994, With BOP as a dependent variable, Communication (COM) and Transport (TRP) showed negative signs while Financial sector (FIN) remained significant. Again between 1995 and 2008, when GATS became operationalized, the Financial and Tourism were negatively inclined with the Balance of Payment and all the variables were significant at 0.05. With BOP, only the TRP was not significant. By implication, the transport sector did not show any appreciable impact on the BOP as a measure of economic development during the period.

The Adj. R^2 in both cases shows that 99% of the observed variation in the dependent variable is explained by the independent variables. It could also be seen from the result that Durbin Watson value is reasonably close to 2 indicating that autocorrelation is not a problem in the time series.

The F-test statistics revealed that the overall model is not significant. Since the overall results got from the analysis of data not significant, the implication of this is that, the null hypothesis will be accepted, which says Signing of GATS agreements by the Nigerian government does not have much influence on her balance of payment.

• **Insert Table 4 here** -

i.) Gross Domestic Product.

From the above, nobody from the communication staff respondents agreed to the signing of GATS Agreement and its effects on the GDP of Nigeria. However, eighty five (85%) believed that it has a significant effect, three (3%) were undecided and thirteen percent (13%) believed that the effect was smaller. For the Tourism & culture sector, five percent (5%) and two percent (2%) of staff respondents said that signing of GATS Agreement affected the GDP in Nigeria in a “very large” and “very small extent” respectively. Seventy seven percent (77.42%) respondents believed it on a large extent, zero percent (0.00%) were undecided; sixteen percent (16.13%) believed it to a small extent.

Furthermore, about three percent (2.74%), eighty one (81%), four (4.11%), eleven (10.96%) and one percent (1.37%) of financial staff respondents were of the opinion that signing of GATS Agreement affected the GDP in Nigeria in a very large extent, large extent, undecided, small extent and very small extent respectively. For the Transport sector, three (3.17%), sixty eight percent (68%), zero percent (0.00%), nineteen percent (19.05%) and eight percent (7.52%) staff respondents were of the opinion that signing of GATS Agreement affected the GDP in Nigeria in a very large extent, large extent, undecided, small extent and very small extent respectively. Also, about five percent (4.92%), sixty nine (68.85%), three (3.28%), eighteen (18.03%) and eight percent (8.20%) of business sector respondents are of opinion that signing of GATS Agreement affected the GDP in Nigeria in a very large extent, large extent, undecided, small extent and very small extent respectively.

Furthermore, about six percent (5.88%), sixty five (64.71%), one percent (1.47%), eighteen (17.65%) and ten percent (10.29%) of education sector respondents are of opinion that signing of GATS Agreement affected the GDP in

Nigeria in a very large extent, large extent, undecided, small extent and very small extent respectively. Based on the above result, it could be concluded that signing of GATS agreements has a greater influence of the Gross Domestic Product of Nigeria.

ii) Balance of Payment

From the above, four percent (4.17%) and 0.00% of communication staff respondents said that signing of GATS Agreement affected the Balance of Payment in Nigeria in a very large and very small extent respectively, seventy two (72.22%) believed that it on a large extent, three (2.78%) were undecided and twenty one percent (20.83%) believed that it is at a small extent. For the Tourism & culture sector, ten percent (9.68%) and five percent (4.84%) of staff respondents said that signing of GATS Agreement affected the Balance of Payment in Nigeria in a very large and very small extent respectively, Sixty eight percent (67.74%) respondents believed that it on a large extent, five percent (4.84%) are undecided; sixteen percent (16.13%) believed it at a small extent.

Also, about eight percent (8.22%), fifty three (53.42%), seven (6.85%), fifteen percent (15.07%) and eight percent (16.44%) of financial staff respondents were of the opinion that signing of GATS Agreement affected the Balance of Payment in Nigeria in a very large extent, large extent, undecided, small extent and very small extent respectively. For the Transport sector, six (6.35%), fifty two percent (52.38%), six percent (6.35%), twenty two percent (22.22%) and thirteen percent (12.70%) staff respondents were of the opinion that signing of GATS Agreement affected the Balance of Payment in Nigeria in a very large extent, large extent, undecided, small extent and very small extent respectively. Also, about ten percent (9.84%), forty nine (49.18%), five (4.98%), twenty eight (27.87%) and eight percent (8.20%) of business sector respondents were of the opinion that signing of GATS Agreement affected the Balance of Payment in Nigeria in a very large extent, large extent, undecided, small extent and very small extent respectively.

Furthermore, about fifteen percent (14.70%), forty nine (48.52%), three percent (2.94%), twenty (22.05%) and twelve percent (11.76%) of education sector respondents were of the opinion that signing of GATS Agreement affected the Balance of Payment in Nigeria in a very large extent, large extent, undecided, small extent and very small extent respectively. From the above result, it could be seen that signing of GATS agreements has affected the Balance of Payment in a small extent.

8. Conclusion and Recommendations

This paper focused on the influence of GATS agreements on the balance of payment of Nigeria. One important feature of Nigeria's services trade, which constrained the depth of analysis in this paper, is the inadequate disaggregation of data. Despite the aggregation problem, analysis showed that Nigeria's share of services trade in Africa rose unsteadily from the late 1980s to 2010, but indicating greater dynamism than Africa's share of world services trade.

Transport, travel and other services trade continued to increase up till 1998, becoming, therefore, more significant in Nigeria's total trade, while the country was persistently in services account deficit for most of 1989–1998, but between 1999 and 2008 there was an increase in service sectors. There should be provision of more technical support and resources to improve the regulatory environment and Multilateral negotiations can help deliver both domestic reform and improved access with the fulfillment of several conditions. Unfair competition environment should be discouraged, so as to increase the extent to which Nigeria will be committed to GATS agreements. And since trade liberalization – export promotion, currency devaluation and removal of trade barriers bring about rapid export and economic growth as a result of the fact that free trade promotes competition, improves resources allocation and economics of scale, in areas where developed countries have a comparative advantage and that the government of Nigeria should try improving on their trade liberalization.

References

Bailey, K.D (1987), "Method of Social Research" New York; Free Press, 3rd Edition,

Farah, F (2001). "An Introduction the GATS for Gender Advocates" International Gender and Trade Network Secretariat. Available at <http://www.GATS.org/english/tratop/gatsqae.htm>

Hisanaga M (2005). "Dynamic Development of Trade in services", The Japan Society of International Economics, Kansai Branch Workshop.

Hoekman, R. (2000). "The Next Round of Services Negotiations: Identifying Priorities and Options". Review of the Federal Reserve Bank of St. Louis. July/August.

Otokiti, S. O. (1995) "International Business" UAE, Dubai Printing Press,
Otokiti, S. O. (2007) "International Business" UAE, Dubai Printing Press,

Oyejide, T.A and Bankole A.S (2001) "Liberalisation of the Services Sector in Nigeria: Implications of Unilateral and Multilateral approaches" A Paper Prepared for the African Economic Research Consortium on Services Sector Liberalization in Nigeria

WTO [2010], "Measuring trade in services, a training module for the World Bank", A training module produced by WTO / OMC

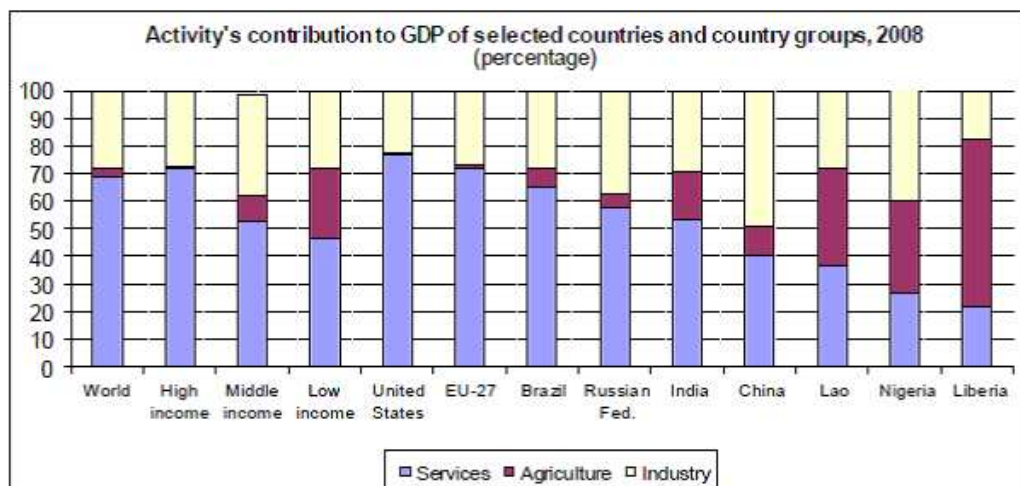
Vik. A, Westerheijden.D, and Wende.M.V.D (2008) "GATS and the steering capacity of a nation state in higher education": Case studies of the Czech Republic and the Netherlands. Journal of Globalisation, Societies and Education 2008, issue 1.

Sinclair, S (2000) After Seattle: "How the New WTO Services 2000" Negotiations threaten Democratic Governance. Canadian Centre for Policy Alternatives.

APPENDIXES

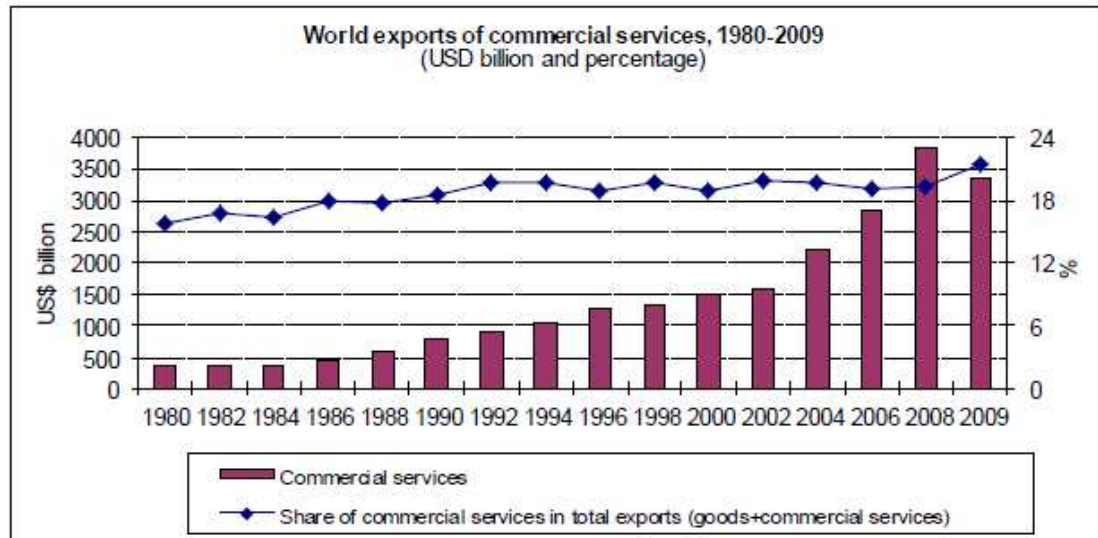
1. List of Figures

Graph 1: Graph showing the activity's contribution to GDP



Sources: World Bank, World Development Indicators (WDI) database online and Eurostat database (EU data) Theme 2 (Oct 2010) – note that "construction" is included in the industry sector.

Graph 2: Graph showing the commercial services



Source: WTO

Trade

in Services is classified into four modes of supply (Bankole, 2007 Chanda, 2002.): They are as follows, i)

2. List of Tables

Table 1: Descriptive Statistics of Intersectoral Analysis of GATS

	BOP N'M	GDP N'M
Mean	3761674.	3761674.
Median	2317965.	2317965.
Maximum	18564595	18564595
Minimum	67908.60	67908.60
Std. Dev.	5043442.	5043442.
Skewness	1.736847	1.736847
Kurtosis	5.139859	5.139859
Jarque-Bera	15.25842	15.25842
Probability	0.000486	0.000486
Sum	82756835	82756835
Sum Sq Dev.	5.34E+14	5.34E+14
	22	22

Source; E-View result computed by the researcher

Table 2: Unit root result of developmental variables and services sectors

Variable	ADF	Critical ratio (5%)	Order of integration
GDP	-3.21	-3.07	I (2)
BOP	-3.21	-3.07	I (2)

Source: E-View result

Table 3: Dependent Variable: BOP,

Time Frame; 1985 – 1994 / 1995 – 2008.

	1985 –1994		1995 –2008		Diff(a-b)
Variable	Coefficient	t-test	Coefficient	t-test	
C	143409.0	0.51	325624.7	1.28	-182215.7
COM	-710.31	-0.71	-32.92	-2.32	-677.39
FIN	14.55	2.42	43.43	3.54	-28.88
TRP	104.00	1.37	7.23	1.35	96.77
TRSM	-756.60	-0.95	138.62	5.13	-895.22

Where C – Constant, COM –Communication, FIN- Finance, TRP-Transport

TRSM- Tourism.

BOP (1985 – 1994)

BOP (1995 – 2008).

R^2 : 0.99

R^2 : 0.99

Adj R^2 : 0.99

Adj R^2 : 0.99

DW: 2.20

DW: 2.33

F- Stat.: 175.05.

F- Stat.: 1286.53.

Table 4: Respondents Opinions on the effects of Nigeria's Signing of GATS Agreements

	Communication (n=72)	Tourism & Culture (n=62)	Financial (n=73)
To what extent has the signing of GATS Agreements affected the following.			
Gross Domestic Product in Nigeria			
Very Large Extent	—(0.00%)	03(4.84%)	02(2.74%)
Large Extent	61(84.72%)	48(77.42%)	59(80.82%)
Undecided	02(2.78%)	—(0.00%)	03(4.11%)
Small Extent	09(12.56%)	0(16.13%)	08(10.96)
Very Small Extent	— (0.00%)	01(1.61%)	01(1.37%)
Balance of Payment			
Very Large Extent	03(4.17%)	06(9.68%)	06(8.22%)
Large Extent	52(72.22%)	42(67.74%)	39(53.42%)
Undecided	02(2.78%)	03(4.84%)	05(6.85%)
Small Extent	15(20.83%)	10(16.13%)	11(15.07%)
Very Small Extent	—(0.00%)	03(4.84%)	12(16.44%)
	Transport	Business	Education

	(n=63)	(n=61)	(n=68)																				
Gross Domestic Product in Nigeria																							
Very Large Extent	02(3.17%)	03(4.92%)	04(5.88%)																				
Large Extent	43(68.25%)	42(68.85%)	44(64.71%)																				
Undecided	— (0.00%)	02(3.28%)	01(1.47%)																				
Small Extent	12(19.05%)	11(18.03%)	12(17.65%)																				
Very Small Extent	06(7.52%)	05(8.20%)	07(10.29%)																				
Employment Generation in Nigeria																							
Very Large Extent	03(4.76%)	02(3.28%)	04(5.88%)																				
Large Extent	38(50.32%)	38(62.30%)	44(64.71%)																				
Undecided	03(4.76%)	02(3.28%)	03(4.41%)																				
Small Extent	12(19.05%)	12(19.05%)	07(10.29%)																				
Very Small Extent	07(11.11%)	07(11.48%)	03(4.41%)																				
3. Output of E - Views Statistical Analysis																							
Null Hypothesis: D(GDP,2) has a unit root																							
Exogenous: Constant																							
Lag Length: 5 (Automatic based on SIC, MAXLAG=8)																							
		t-Statistic	Prob.*																				
Augmented Dickey-Fuller test statistic		-3.207570	0.0386																				
Test critical values:	1% level	-3.920350																					
	5% level	-3.065585																					
	10% level	-2.673459																					
*MacKinnon (1996) one-sided p-values.																							
Warning: Probabilities and critical values calculated for 20 observations and may not be accurate for a sample size of 16																							
Source; E-VIEW result computed by the researcher																							
<div><div>Null Hypothesis: D(BOP,2) has a unit root</div><div>Exogenous: Constant</div><div>Lag Length: 5 (Automatic based on SIC, MAXLAG=8)</div><table><tr><td></td><td></td><td>t-Statistic</td><td>Prob.*</td></tr><tr><td colspan="2">Augmented Dickey-Fuller test statistic</td><td>-3.207570</td><td>0.0386</td></tr><tr><td>Test critical values:</td><td>1% level</td><td>-3.920350</td><td></td></tr><tr><td></td><td>5% level</td><td>-3.065585</td><td></td></tr><tr><td></td><td>10% level</td><td>-2.673459</td><td></td></tr></table><div>*MacKinnon (1996) one-sided p-values.</div><div>Warning: Probabilities and critical values calculated for 20 observations and may not be accurate for a sample size of 16</div><div>Source; E-VIEW result computed by the researcher</div></div>						t-Statistic	Prob.*	Augmented Dickey-Fuller test statistic		-3.207570	0.0386	Test critical values:	1% level	-3.920350			5% level	-3.065585			10% level	-2.673459	
		t-Statistic	Prob.*																				
Augmented Dickey-Fuller test statistic		-3.207570	0.0386																				
Test critical values:	1% level	-3.920350																					
	5% level	-3.065585																					
	10% level	-2.673459																					
Dependent Variable: BOP																							
Method: Least Squares																							
Date: 06/30/05 Time: 03:38																							
Sample: 1995 2008																							
Included observations: 14																							
Variable	Coefficient	Std. Error	t-Statistic	Prob.																			
C	325624.7	254719.4	1.278366	0.2331																			
COM	-32.91898	14.21454	-2.315867	0.0458																			
FIN	43.43196	12.25604	3.543718	0.0063																			
TRP	7.229411	5.341488	1.353445	0.2089																			
TRSM	138.6240	26.99781	5.134639	0.0006																			

R-squared	0.998254	Mean dependent var	8854438.
Adjusted R-squared	0.997478	S.D. dependent var	7550898.
S.E. of regression	379185.3	Akaike info criterion	28.80189
Sum squared resid	1.29E+12	Schwarz criterion	29.03013
Log likelihood	-196.6132	F-statistic	1286.526
Durbin-Watson stat	2.374254	Prob(F-statistic)	0.000000

Source; Result computed by the researcher

Dependent Variable: BOP

Method: Least Squares

Date: 06/30/05 Time: 03:39

Sample: 1985 1994

Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	143409.0	282075.1	0.508407	0.6328
COM	-710.3129	1001.958	-0.708924	0.5100
FIN	14.55238	6.017267	2.418437	0.0602
TRP	104.0033	75.95591	1.369259	0.2292
TRSM	-756.6207	799.1152	-0.946823	0.3872

R-squared	0.992910	Mean dependent var	329419.8
Adjusted R-squared	0.987238	S.D. dependent var	285143.2
S.E. of regression	32212.75	Akaike info criterion	23.90497
Sum squared resid	5.19E+09	Schwarz criterion	24.05626
Log likelihood	-114.5248	F-statistic	175.0503
Durbin-Watson stat	2.203357	Prob(F-statistic)	0.000015

Source; Result computed by the researcher

This academic article was published by The International Institute for Science, Technology and Education (IISTE). The IISTE is a pioneer in the Open Access Publishing service based in the U.S. and Europe. The aim of the institute is Accelerating Global Knowledge Sharing.

More information about the publisher can be found in the IISTE's homepage:

<http://www.iiste.org>

The IISTE is currently hosting more than 30 peer-reviewed academic journals and collaborating with academic institutions around the world. **Prospective authors of IISTE journals can find the submission instruction on the following page:**

<http://www.iiste.org/Journals/>

The IISTE editorial team promises to review and publish all the qualified submissions in a fast manner. All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Printed version of the journals is also available upon request of readers and authors.

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

